



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2012-1072; Directorate Identifier 2012-NM-141-AD; Amendment 39-17449; AD 2013-09-07]**

**RIN 2120-AA64**

**Airworthiness Directives; Bombardier, Inc. Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), Department of Transportation (DOT).

**ACTION:** Final rule.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for certain Bombardier, Inc. Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes. This AD was prompted by reports of two in-service incidents where the left main landing gear (MLG) failed to extend. This AD requires installing stopper plates on the aft uplock frames in the MLG bay adjacent to the right and left MLG uplock assemblies. We are issuing this AD to prevent incorrect installation of the upper bolt in the MLG uplock assembly, which could prevent the MLG from extending and could adversely affect the safe landing of the airplane.

**DATES:** This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may examine the AD docket on the Internet at

<http://www.regulations.gov> or in person at the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC.

**FOR FURTHER INFORMATION CONTACT:** Cesar Gomez, Aerospace Engineer, Airframe and Mechanical Systems Branch, ANE-171, FAA, New York Aircraft Certification Office (ACO), 1600 Stewart Avenue, Suite 410, Westbury, New York 11590; phone: 516-228-7328; fax: 516-794-5531.

**SUPPLEMENTARY INFORMATION:**

**Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. That NPRM was published in the Federal Register on October 16, 2012 (77 FR 63281). That NPRM proposed to correct an unsafe condition for the specified products. The Mandatory Continuing Airworthiness Information (MCAI) states:

There have been two reported in-service incidents where the left main landing gear (MLG) failed to extend. The investigation revealed that in both cases, the uplock assembly had been replaced prior to the in-service incidents and the upper bolt of the uplock assembly was incorrectly installed. The incorrect installation of the upper bolt resulted in the uplock assembly pivoting on the lower attachment bolt and preventing the MLG from extending

under normal or alternate extension.

The potential for an incorrect installation of the upper bolt could occur at both the left hand side (LHS) and/or the right hand side (RHS) MLG uplock assembly. Failure of the MLG to extend could adversely affect the safe landing of the aeroplane.

This [Canadian] AD mandates the installation of stopper plates on the aft uplock frames in the MLG bay, adjacent to both the RHS and LHS MLG uplock assemblies, to prevent an incorrect installation of the MLG uplock assembly.

You may obtain further information by examining the MCAI in the AD docket.

**Actions Since the NPRM (77 FR 63281, October 16, 2012) was Issued**

We have reviewed Bombardier Service Bulletin 601R-32-109, Revision A, dated February 26, 2013. In the NPRM (77 FR 63281, October 16, 2012), we referred to Bombardier Service Bulletin 601R-32-109, dated May 29, 2012, as the appropriate source of service information for doing the actions specified in the NPRM. Revision A of the service information adds information for parts that are listed in paragraph 1.G. “Material – Price and Availability,” and small editorial changes that do not have an effect on the technical content of the service information.

We have updated paragraphs (g) and (j) of this AD to refer to Bombardier Service Bulletin 601R-32-109, Revision A, dated February 26, 2013. We have also added a new paragraph (h) to this AD to give credit for actions done before the effective date of this AD, using Bombardier Service Bulletin 601R-32-109, dated May 29, 2012, and re-identified the subsequent paragraph identifiers accordingly.

## **Comments**

We gave the public the opportunity to participate in developing this AD. We have considered the comments received.

The National Transportation Safety Board supported the NPRM (77 FR 63281, October 16, 2012).

## **Request to Shorten the Compliance Time**

The Air Line Pilots Association International (ALPA) requested that the proposed compliance time in the NPRM (77 FR 63281, October 16, 2012) be shortened from “Within 5,500 flight hours or 48 months after the effective date of this AD, whichever occurs first ... .” to “Within 2,400 flight hours or 24 months after the effective date of the AD, whichever occurs first ... .” The ALPA based its suggested compliance time on the two reported in-service incidents and the potential safety implication of landing with an MLG fully or partially retracted.

We do not agree with the request to shorten the compliance time. The proposed compliance time in the NPRM (77 FR 63281, October 16, 2012) was based on a risk assessment completed by the airplane manufacturer, Bombardier, Inc. The risk was conservatively assessed with a compliance time of 6,000 flight hours, based on the estimated release date of Bombardier service information. Transport Canada Civil Aviation (TCCA), the State of Design Authority, concurred with Bombardier, Inc.’s risk assessment. Bombardier, Inc. reduced the compliance time from 6,000 flight hours to 5,500 flight hours because the release date of the service information was delayed. Also, the compliance time of 5,500 flight hours or 48 months after the effective date of this

AD, whichever occurs first, corresponds with the compliance time of parallel TCCA AD CF-2012-22, dated July 24, 2012. We have not changed the AD in this regard.

### **Request to Add a Required Inspection Item**

The ALPA also recommended that, until operators have complied with the proposed AD (77 FR 63281, October 16, 2012), the operators be required to have a Required Inspection Item for any maintenance work involving the upper MLG assembly. The ALPA recommended this requirement to ensure correct installation of the upper MLG assembly until the proposed AD is complied with.

We do not agree with this recommendation. If operators properly follow the instructions in the airplane maintenance manual, the upper MLG uplock assembly will be correctly installed. In addition, Bombardier, Inc. issued All Operators Message No. 1307, dated September 6, 2011, to inform operators of the second in-flight MLG incident; and Service Letter CRJ100/200/440-SL-32-046, dated October 11, 2011, to provide additional information and recommendations to address the second in-flight MLG incident. We have not changed the AD in this regard.

### **Conclusion**

We reviewed the available data and determined that air safety and the public interest require adopting the AD with the changes described previously—and minor editorial changes. We have determined that these changes:

- Are consistent with the intent that was proposed in the NPRM (77 FR 63281, October 16, 2012) for correcting the unsafe condition; and

- Do not add any additional burden upon the public than was already proposed in the NPRM (77 FR 63281, October 16, 2012).

### **Costs of Compliance**

We estimate that this AD will affect 574 products of U.S. registry. We also estimate that it will take about 5 work-hours per product to comply with the basic requirements of this AD. The average labor rate is \$85 per work-hour. Based on these figures, we estimate the cost of this AD to the U.S. operators to be \$243,950, or \$425 per product.

### **Authority for This Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

## **Regulatory Findings**

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a regulatory evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

## **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains the NPRM (77 FR 63281, October 16, 2012), the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone (800) 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

## **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new AD:

**2013-09-07 Bombardier, Inc.:** Amendment 39-17449. Docket No. FAA-2012-1072; Directorate Identifier 2012-NM-141-AD.

#### **(a) Effective Date**

This airworthiness directive (AD) becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### **(b) Affected ADs**

None.



**(c) Applicability**

This AD applies to Bombardier, Inc. Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes, certificated in any category, serial numbers 7003 through 7990 inclusive, and 8000 through 8999 inclusive.

**(d) Subject**

Air Transport Association (ATA) of America Code 32, Landing gear.

**(e) Reason**

This AD was prompted by reports of two in-service incidents where the left main landing gear (MLG) failed to extend. We are issuing this AD to prevent incorrect installation of the upper bolt in the MLG uplock assembly, which could prevent the MLG from extending and could adversely affect the safe landing of the airplane.

**(f) Compliance**

You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

**(g) Installation of Stopper Plates**

Within 5,500 flight hours or 48 months after the effective date of this AD, whichever occurs first: Install stopper plates on the aft uplock frame of both the right and left MLG uplock assemblies, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 601R-32-109, Revision A, dated February 26, 2013.

**(h) Credit for Previous Actions**

This paragraph provides credit for actions required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD using Bombardier Service Bulletin 601R-32-109, dated May 29, 2012, which is not incorporated by reference in this AD.

**(i) Other FAA AD Provisions**

The following provisions also apply to this AD:

**(1) Alternative Methods of Compliance (AMOCs):** The Manager, New York Aircraft Certification Office (ACO), ANE-170, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the ACO, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; fax 516-794-5531. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

**(2) Airworthy Product:** For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of

Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

**(j) Related Information**

(1) Refer to MCAI Canadian Airworthiness Directive CF-2012-22, dated July 24, 2012; and Bombardier Service Bulletin 601R-32-109, Revision A, dated February 26, 2013; for related information.

(2) For service information identified in this AD, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514-855-5000; fax 514 855-7401; email [thd.crj@aero.bombardier.com](mailto:thd.crj@aero.bombardier.com); Internet <http://www.bombardier.com>.

**(k) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Bombardier Service Bulletin 601R-32-109, Revision A, dated February 26, 2013.

(ii) Reserved.

(3) For service information identified in this AD, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514-855-5000;

fax 514 855-7401; email [thd.crj@aero.bombardier.com](mailto:thd.crj@aero.bombardier.com); Internet

<http://www.bombardier.com>.

(4) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:

<http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Renton, Washington, on April 23, 2013.

Jeffrey E. Duven,  
Acting Manager,  
Transport Airplane Directorate,  
Aircraft Certification Service.

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